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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,738	09/28/2001	Michael Soemo	2001P18038US	3567
7590 Siemens Corporation Intellectual Property Department 186 Wood Avenue South Iselin, NJ 08830	01/24/2008		EXAMINER Caldwell, Andrew T	
			ART UNIT 2142	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	09/966,738	SOEMO ET AL.
	Examiner	Art Unit
	Andrew Caldwell	2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extension of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 29 March 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-13, 15-39 and 47-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-13, 15-39 and 47-53 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 27 October 2006 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 20061019.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application
- 6) Other: _____

1

2

3 **Specification**

4 The specification is objected to under 37 CFR 1.52(a)(1)(v) because, at pages 8-
5 9, the text labeling the columns of the table is shaded. Such text is not easily subject to
6 optical character recognition as per the rule.

7

8

Claim Rejections - 35 USC § 112

9 The following is a quotation of the first paragraph of 35 U.S.C. 112:

10 The specification shall contain a written description of the invention, and of the manner and process of
11 making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the
12 art to which it pertains, or with which it is most nearly connected, to make and use the same and shall
13 set forth the best mode contemplated by the inventor of carrying out his invention.

14 Claims 1-13, 15-39, and 47-53 are rejected under 35 U.S.C. 112, first paragraph,
15 because the specification, while being enabling for using the protocol in a LonTalk®
16 environment, does not reasonably provide enablement for implementing the invention
17 using another building automation and control network, such as a BACnet environment.
18

19 The amount of direction provided by the Applicants as to how implement their
20 invention using a protocol other than LonTalk® is negligible. On page 8 lines 11-16 of
21 the specification, the Applicants describe how their proprietary protocol is embedded in
22 the explicit messages fields of LonTalk® messages. The Examiner fails to see where in
23 the specification the Applicants have described how to implement their invention using
24 any protocol other than LonTalk®.

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1 As to the existence of a working example, the Applicants have provided no
2 working example other than in the context of a LonTalk® environment. Although the
3 Applicants have raised BACnet as an alternative building automation and control
4 network (p. 2 lines 12-16), the remainder of the specification does not provide working
5 examples using protocols other than LonTalk®.

6 As to the state of the prior art, two references, although they are not prior art, are
7 particularly relevant. Swan describes how LonTalk®'s standard network variable types
8 are "quite unlike" BACnet objects (p. 1). Swan describes how the means and messages
9 by which LonTalk® standard network variable types are read and written are "quite
10 unlike" BACnet services (p. 1). The BACnet FAQ describes how the BACnet and
11 Echelon (i.e., LonTalk®) language are fundamentally different and devices using one of
12 the languages can never interoperate directly with devices using the other (p. 3 "You
13 mentioned that BACnet can use LonTalk®"). No evidence suggests that these
14 fundamental differences between the two protocols have not always existed. It is
15 therefore reasonable to infer that the state of the art at the time Swan and the BACnet
16 FAQ were written existed at the time the invention was made. The state of the prior art
17 would therefore suggest was such that a person of ordinary skill in the art would have
18 been unable to make and use the claimed invention using any building automation and
19 control protocol other than LonTalk®.

20 As to the breadth of the claims, they are written using generic terminology and
21 are not limited to the LonTalk® protocol.

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1 As to the level of predictability in the art, it would suggest that the claimed
2 invention is enabled since this art is predictable.

3 In the response filed on 10/27/06, the applicants assert that incorporation of the
4 present invention in a predictable data transmission protocol would be within the skill of
5 one of ordinary skill in the art. If this statement is to be considered evidence, it has
6 been considered but is given little weight. Attorney argument cannot take the place of
7 evidence. See MPEP 2145.

8 The first four factors listed above weigh against a conclusion that the claimed
9 invention is enabled throughout its entire scope. The fifth factor would weigh in favor of
10 a conclusion that the claimed invention is enabled throughout its entire scope. The
11 final factor is not probative since it is not evidence. 333After weighing the evidence, the
12 Examiner concludes that the state of the prior art is particularly important. When a
13 reference describes how fundamental differences exist between the two networks
14 disclosed in the specification as possible embodiments of the "generic" protocol of the
15 claims, the Examiner fails to see how the entire scope of the claim is enabled.

16

Claim Rejections - 35 USC § 102

18 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that
19 form the basis for the rejections under this section made in this Office action:

20 A person shall be entitled to a patent unless -

21 (e) the invention was described in (1) an application for patent, published under section 122(b), by
22 another filed in the United States before the invention by the applicant for patent or (2) a patent
23 granted on an application for patent by another filed in the United States before the invention by the
24 applicant for patent, except that an international application filed under the treaty defined in section
25 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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1 only if the international application designated the United States and was published under Article 21(2)
2 of such treaty in the English language.

3 Claims 1-5,8,10-13,15-16, 18-22, 25, 27-34, 36-39, and 47-51 are rejected under

4 35 U.S.C. 102(e) as being anticipated by Hite et al., U.S. Patent No. 6,763,040.

5 Regarding claims 1 and 47, they are rejected for the reasons given in the final Office

6 action mailed on August 9, 2005. Regarding claims 1-5,8,10-13,15-16, 18-22, 25, 27-

7 34, 36-39, and 47-53, they are rejected for the reasons given in the non-final Office

8 action mailed on January 14, 2005. Regarding claims 48-51, the limitations introduced

9 in these dependent claims are identical to those introduced in dependent claims 2-5.

10 Since the reasons for rejection given for claims 2-5 apply equally to claims 48-51, those

11 reasons will not be repeated.

12

13

Claim Rejections - 35 USC § 103

14 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

15 obviousness rejections set forth in this Office action:

16 (a) A patent may not be obtained though the invention is not identically disclosed or described as set
17 forth in section 102 of this title, if the differences between the subject matter sought to be patented and
18 the prior art are such that the subject matter as a whole would have been obvious at the time the
19 invention was made to a person having ordinary skill in the art to which said subject matter pertains.
20 Patentability shall not be negated by the manner in which the invention was made.

21 This application currently names joint inventors. In considering patentability of

22 the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

23 the various claims was commonly owned at the time any inventions covered therein

24 were made absent any evidence to the contrary. Applicant is advised of the obligation

25 under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

26 not commonly owned at the time a later invention was made in order for the examiner to

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- 1 consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)
- 2 prior art under 35 U.S.C. 103(a).

3

4 Claims 9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over
5 Hite for the reasons given in the non-final Office action mailed on January 14, 2005.

6

7 Claims 6-7 and 52-53 are rejected under 35 U.S.C. 103(a) as being unpatentable
8 over Hite in view of Nason et al., U.S. Patent App. Pub. 2002/0174240. As to claims 6-
9, they are rejected for the reasons given in the non-final Office action mailed on
10 January 14, 2005. Regarding claims 52-53, the limitations introduced in these
11 dependent claims are identical to those introduced in dependent claims 6-7. Since the
12 reasons for rejection given for claims 6-7 apply equally to claims 52-53, those reasons
13 will not be repeated.

14

15 Claims 23-24, 26, and 35 are rejected under 35 U.S.C. 103(a) as being
16 unpatentable over Hite in view of Albert et al., U.S. Patent No. 6,775,692, for the
17 reasons given in the non-final Office action mailed on January 14, 2005.

18

19 Claims 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rhodes
20 et al., U.S. Patent No. 6,073,110, in view of Hite et al., U.S. Patent No. 6,763,040, and
21 the Admitted Prior Art.

22

1 Regarding claim 1, the preamble has been given patentable weight since the
2 claim body refers back to the preamble. See "the application controller and "the
3 applications" at lines 5-6. Rhodes teaches the invention substantially as claimed by
4 disclosing a communication protocol for use in a system controller that includes an
5 application controller (Fig. 1 elem. 20 control node) and a plurality of applications (Fig. 1
6 elems. 14 including applications 30) for controlling a plurality of device controllers (Fig. 2
7 elems. 24) on a control network (Fig. 1 elem. 22) using data relating to system points
8 (Fig. 2 Zone data) that correspond to data variables in a data network. Rhodes teaches
9 a plurality of predefined messages transmitted between the application controller and
10 the applications for instructing the application controller to perform a function relating to
11 a select system point and for reporting to the applications in response to said instruction
12 (col. 5 lines 29-51).

13 Rhodes does not teach a protocol wherein said communications protocol is a
14 proprietary protocol; said plurality of messages include a discover message transmitted
15 from the application to the application controller to determine whether the select system
16 point is stored in a database of the application controller; a message identification field
17 for identifying a select message from said plurality of messages; and a protocol
18 identification field for identifying said select message as being transmitted via said
19 proprietary protocol.

20 As to the limitation of a proprietary protocol, Hite teaches a proprietary protocol
21 per the admission in the first complete paragraph on page 6 of the defective Appeal
22 Brief filed on January 12, 2006. It would have been obvious to one of ordinary skill in

1 the art at the time the invention was made to modify Rhodes, which is silent as to
2 whether the protocol being used is proprietary or not, to use a proprietary protocol as
3 taught by Hite. The Applicants' specification states that, in this art, proprietary protocols
4 were the norm until recently (i.e., at the time the application was filed) and that use of
5 nonproprietary protocols is increasing. A person of ordinary skill in the art at the time
6 the invention was made would have known what the applicants admitted at page 2 lines
7 8-16. A person of ordinary skill in the art at the time the invention was made would
8 therefore have reasonably inferred, based on the state of the art, that Rhodes, which
9 was filed almost four years before this application, would use a proprietary protocol. It
10 would therefore have been obvious to one of ordinary skill in the art at the time the
11 invention was made to modify Rhodes to use a proprietary protocol as taught by Hite
12 based on logical reasoning from the APA.

13 As to the limitations of the protocol including a message identification field for
14 identifying a select message from said plurality of messages and a protocol
15 identification field for identifying said select message as being transmitted via said
16 proprietary protocol, Rhodes is silent as to the details of the protocol being used. Hite,
17 on the other hand, teaches these features (Fig. 11 elems. 670 and 690). It would have
18 been obvious to one of ordinary skill in the art at the time the invention was made to
19 modify the protocol of Rhodes to use a protocol field identifying the protocol and a
20 message field identifying a message as taught by Hite. This modification would have
21 been obvious because identifying the protocol would allow multiple protocols to be

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1 supported and identifying the message would allow multiple messages to be supported,
2 thus making the system expandable.

3 As to the limitation of the plurality of messages include a discover message
4 transmitted from the application to the application controller to determine whether the
5 select system point is stored in a database of the application controller, Hite teaches a
6 discover message as claimed (Col. 33 lines 11-24). It would have been obvious to one
7 of ordinary skill in the art at the time the invention was made combine Hite's teaching
8 regarding retrieving a list of online devices with the system of Rhodes by having the
9 applications query the control node to determine which controlled devices are actually
10 online. This combination would have been obvious because it would allow the system
11 of Rhodes to determine which devices are online (Hite col. 33 lines 11-24).

12

13 ***Response to Arguments***

14 Regarding the objection to the drawings under 37 CFR 1.83(a), it has been
15 withdrawn in view of the applicants' remarks in the response filed on 10/27/06.

16 Regarding the objection to the drawings under 37 CFR 1.78(o), it has been
17 withdrawn in view of the replacement sheets submitted by the applicants in the
18 response filed on 10/27/06.

19 Regarding the objection to the specification under 37 CFR 1.75(d)(1), it has been
20 withdrawn in view of the applicants' remarks in the response filed on 10/27/06.

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1 Regarding the objection to the summary of the invention under 37 CFR 1.73, it
2 has been withdrawn in view of the applicants' amendment to the specification filed on
3 10/27/06.

4 Regarding the objection to the specification under 37 CFR 1.52(b)(2)(iii), it has
5 been withdrawn in view of the applicants' remarks in the response filed on 10/27/06.

6 Regarding the objection to the specification under 37 CFR 1.52(a)(1)(v), the
7 applicants' arguments have been considered but are not deemed persuasive. The
8 applicants appear to argue that this objection should be withdrawn because the
9 objection was not raised before. While it is regrettable that the objection was not made
10 before, the time at which the objection is raised is alone not sufficient to justify a waiver
11 of the rule. The applicants also argue that there is no proof that the text at issue is not
12 capable of optical character recognition. The examiner sees no reason why actual
13 proof should be required since it is generally known that shading inherently makes the
14 process of optical character recognition more difficult. However, assuming without
15 conceding that proof is required, the examiner attempted to OCR the text at issue and
16 found that it was not recognized by USPTO OCR software that is part of the Image File
17 Wrapper system. Accordingly, the objection is maintained. The applicants are
18 reminded that they may request, under 37 CFR 1.111, that the objection may be held in
19 abeyance until allowable subject matter is indicated.

20 Regarding the rejection to the claims under 35 U.S.C. 101, it has been withdrawn
21 in view of the applicants' amendment to the claims on 10/27/06.

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1 Regarding the rejection of claims 1-13, 15-39, and 47-53 under 35 U.S.C. 112
2 first paragraph, the applicants' arguments have been considered but are not deemed
3 persuasive. The applicants appear to be arguing that since the art is predictable, only a
4 single working example must be provided in order to enable the entire scope of the
5 claim. While this may be true in some circumstances, the consideration of whether the
6 entire scope of the claims is enabled is fact specific. In this case, the applicants have
7 ignored the evidence in the record regarding the substantial and fundamental
8 differences between the LonTalk® and BACnet protocols. See the reasons for rejection
9 given above. In a case such as this, where two protocols significantly differ, the
10 applicants were obliged to provide more guidance in their application as originally filed
11 as to how one of ordinary skill in the art would make and use the invention using both
12 protocols. In addition, the applicants argue that incorporation of the present invention in
13 a predictable data transmission protocol would be within the skill of one of ordinary skill
14 in the art. This argument is not persuasive because it is unsupported by any evidence.

15 Regarding the rejection of claims 1-5,8,10-13,15-16, 18-22, 25, 27-34, 36-39,
16 and 47-51 under 35 U.S.C. 102(e) as being anticipated by Hite, the applicants'
17 arguments filed on 10/27/06 have been considered but are not deemed persuasive.
18 The applicants argued that (a) Hite cannot anticipate the claimed invention because it
19 does not teach applications and an application controller that communicate using a
20 proprietary protocol; and (b) Hite cannot anticipate the claimed invention because it
21 does not teach a discover message that inquires as to whether an element
22 corresponding to a system point is stored in a database of an application controller.

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1 As to point (a), this argument, although not specifically stated, appears on page
2 22 of the remarks filed on 10/27/06 where the applicants point out that Hite's IA server
3 translates between a web based protocol and a proprietary control network protocol.
4 While HTTP itself is not a proprietary protocol, the applicants' characterization of Hite
5 ignores the fact that the protocol conversion is invoked by calls to a CGI or ASP handler
6 on the IA server (Fig. 4). When invoking a CGI, an HTTP request will have particular
7 parameter information associated with the request (col. 4 lines 20-38). Those
8 parameters are specific to the particular processes implemented on the IA server. Not
9 all web servers would recognize what to do with a request containing those parameters.
10 Accordingly, Hite discloses a system in which proprietary information (i.e., information
11 specific to Hite's application and not generic to all web applications) is transmitted to the
12 IA server. The examiner would point out to the applicants the similarity between this
13 insertion of application specific information into a HTTP request and the applicants'
14 insertion of SP protocol information into the "explicit messages" fields of a LONTalk®
15 message. See specification p. 8 lines 11-16.

16 As to point (b), this argument has been considered but is not deemed
17 persuasive. When a browser in Hite's system access a control area network through a
18 control network portal in order to monitor devices on the control area network, the
19 browser could send a message that would subsequently be translated into a command
20 message on the control area network. This message can discover specific information
21 about a specific operating parameter of a device on a control area network, such as the
22 current ambient temperature measured by a thermostat. The various parameters

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1 stored in the control area network devices is a distributed database of information. If
2 the browser requests information about a particular device that is not on the network,
3 Hite's system would generate an error message in response to that request. See Hite
4 Table A indicating Error as a potential response. Since the system would returns valid
5 device information when the device is present and error messages if a device is not, the
6 query from the browser would "discover" whether a whether an element corresponding
7 to a system point is stored in a database, albeit a distributed database, of an application
8 controller.

9 Regarding the rejection of claim 3 under 35 U.S.C. 102(e) as being anticipated
10 by Hite, the applicants' arguments filed on 10/27/06 have been considered but are not
11 deemed persuasive. The applicants argued that (a) Hite does not teach a protocol
12 including a system point identification field for identifying a select system point because
13 (a) a system point corresponds to a variable and a variable is something that changes;
14 (b) a URL only accesses a web page and cannot identify a system point; and (c) a URL
15 cannot be part of a proprietary protocol.

16 As to point (a), this argument is not deemed persuasive in view of Hite's
17 disclosure at col. 3 lines 33-49 that users can monitor things such as current ambient
18 temperature which is inherently a changing value.

19 As to point (b), this argument is not persuasive since Hite teaches that the web
20 pages returned to the user contains information about a variable such as current
21 ambient temperature (col. 3 lines 33-49; col. 4 39-52). Clearly Hite's user is able to
22 specify particular information that is desired base on the fact that the user's request

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1 would ultimately be translated into a message on the control area network that is used
2 to obtain specific information from a device, such as current ambient temperature.

3 As to point (c), this argument was addressed above where it was explained how
4 Hite cannot anticipate teaches applications and an application controller that
5 communicate using a proprietary protocol.

6 Regarding the rejection of claim 11 under 35 U.S.C. 102(e) as being anticipated
7 by Hite, the applicants' argued on 10/27/06 that Hite does not teach a message field for
8 determining a format for displaying the element values of a select system point. The
9 persuasiveness of this argument needs to be considered in the context of what the
10 applicants disclose in their specification as field for determining a format for displaying
11 element values. In their specification, the applicants a format field that indicates
12 whether character stings containing the values of elements include formatting
13 information such as the element's units. See specification p. 11 lines 1-10. In view of
14 the remainder of the specification, a message including a measurement such as
15 temperature within a character string can also contain the characters that indicate units
16 of temperature such as F for fahrenheit or C for centigrade. Hite, however, teaches a
17 text based protocol for retrieving parameters such as the current ambient temperature
18 measured by a thermostat. The temperature would be communicated from the
19 thermostat to the master controller via a string of characters. See description of "string"
20 messages in column 22. When a parameter such as a temperature, which in the
21 context of home thermostats, can be measured in a either centigrade or Fahrenheit, a

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1 person of ordinary skill in the art would have recognized that the units would be returned
2 with the value.

3 Regarding the rejection of claim 47 under 35 U.S.C. 102(e) as being anticipated
4 by Hite, the applicants' argued, on 10/27/06 that Hite does not teach that a string of a
5 string command is displayed. This argument is in addition to those arguments raised
6 with respect to claim 47 that are identical to those raised with respect to claim 29. This
7 additional argument is not persuasive because it ignores the fact that Hite describes
8 how a measured parameter, such as an ambient temperature, is measured by a device
9 on a control area network and eventually displayed to a user somewhere on the
10 internet. See col. 3 lines 33-49; col. 4 39-52.

11 Regarding the rejection of claim 29 under 35 U.S.C. 102(e) as being anticipated
12 by Hite, the applicants' argued on 10/27/06 that Hite does not teach a message
13 transmitted for cancelling a previous transmitted message. The applicants are referred
14 to columns 34-35 of Hite discussing the cancellation of notification requests.

15

16 **Conclusion**

17
18 **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time
19 policy as set forth in 37 CFR 1.136(a).

20
21 A shortened statutory period for reply to this final action is set to expire THREE
22 MONTHS from the mailing date of this action. In the event a first reply is filed within
23 TWO MONTHS of the mailing date of this final action and the advisory action is not
24 mailed until after the end of the THREE-MONTH shortened statutory period, then the
25 shortened statutory period will expire on the date the advisory action is mailed, and any
26 extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of
27 the advisory action. In no event, however, will the statutory period for reply expire later
28 than SIX MONTHS from the mailing date of this final action.

29

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1 Any inquiry concerning this communication or earlier communications from the
2 examiner should be directed to Andrew Caldwell, whose telephone number is (571)
3 272-3868. The examiner can normally be reached on M-Th from 9:00 a.m. to 5:30 p.m.
4 EST.

5
6 The fax number for Group 2100 is as follows:

7
8 Fax Responses: 571-273-8300

9
10 Any general inquiry relating to the status of this application can be answered
11 using Patent Application Information Retrieval (PAIR) system, which is available at the
12 USPTO web site. Any questions on using the PAIR system should be directed to the
13 Patent Electronic Business Center toll free at (866) 217-9197.

14
15 

16
17 Andrew Caldwell
18 Supervisory Patent Examiner
19 571-272-3868
20 July 18, 2005

21
22